REMARKS

Claims 1-23, 25-52 and 54-56 are presently pending in the application.

Non-elected claims 1-6, 9-12, 18-22, 25-32, 38-52 and 54 have been withdrawn from consideration, but at least some of these claims are subject to rejoinder, as discussed below. Of the pending, non-withdrawn claims 7, 8, 13-17, 23, 33-37, 55 and 56, claims 7 and 8 are the only independent claims.

Claims 7, 9, 10, 17, 23 and 33-40 have been amended, without prejudice, to more clearly claim the subject matter. Claim 24 has been cancelled without prejudice. New claims 55 and 56 have been added. The claim amendments and new claims are supported by the original claims and specification. For example, amendments to claims 7, 9, 10, 17, 23, 33-37 and 40 are supported by the corresponding original claims; amendments to claims 38 and 39 and new claims 55 and 56 are supported at least by the original claims 38 and 39, and the original specification from page 47, line 18 to page 49, line 16. All of the method claims have been amended to delete language referring to a "step" or "steps," as such language is not necessary and such claims are not intended to be considered and should not be interpreted as being "step plus function" claims under 35 U.S.C. 112, sixth paragraph.

It is respectfully submitted that the amendments made herein are supported by the specification and the original claims and introduce no new subject matter. Entry of the amendments made herein is proper and respectfully requested.

Allowable Subject Matter

Applicants are pleased that the Examiner indicated that claim 8 is allowable and that claims 13-17 contain allowable subject matter. There are no outstanding prior art rejections.

Objection to the Specification

In item 4 of the Office Action, the Examiner has objected to the specification because the last paragraph on page 40 of the specification contains an embedded hyperlink and/or other form of browser-executable code.

Applicants have amended the last paragraph on page 40 by deleting "(www.ncbi.nlm.nih.gov/BLAST/)" from the paragraph, as suggested by the Examiner. Additional changes to the last paragraph on page 40 have been made to more clearly describe the subject matter. All amendments are supported by the original specification and introduce no new subject matter. Applicants respectfully request the Examiner to enter the amendments and withdraw the objection to the specification.

Consideration of Information Disclosure Statement

In item 5 of the Office Action, the Examiner has indicated that the Information Disclosure Statement (IDS) filed on May 17, 2006 was not considered because the fee was not paid.

The Examiner appears to have overlooked that the fee set forth in 37 CFR 1.17(p) was in fact paid together with the filing of the IDS. A copy of an Electronic Acknowledgement Receipt (showing payment at the bottom of the first page) from the USPTO is submitted with this Amendment. Applicants respectfully request the Examiner to consider all documents submitted in the IDS and acknowledge the consideration in the subsequent Office Action.

Rejoinder of Claims

In item 6 of the Office Action, the Examiner has withdrawn claims 1-6, 9-12, 18-22, 25-32, 38-52 and 54 from further examination, because these claims are allegedly drawn to a nonelected invention and there is allegedly no allowable generic or linking claims.

In item 9 of the Office Action, the Examiner has acknowledged the rejoinder of claims 32-37 with claim 13. It appears that claim 32 has been inadvertently included, because claim 32 depends from the withdrawn claim 31, rather than from claim 13.

In item 10 of the Office Action, the Examiner has indicated that claims 38 and 39 were not rejoined with claim 13, because they allegedly do not properly depend from claim 13 or claim 7.

Claim 38 and 39 have been amended. The subject matter of original claim 38 supports amended claim 38 and new claim 55. The subject matter of original claim 39 supports amended claim 39 and new claim 56. Amended claims 38 and 39 and new claims 55 and 56 each includes culturing a transformant comprising a recombinant vector containing a polynucleotide according

to claim 7 and preparing from the cultured transformant a cell membrane fraction comprising a protein encoded by the polynucleotide according to claim 7. This recitation has made claims 38, 39, 55 and 56 properly depend from claim 7.

Upon finding claim 7 allowable for the reasons set forth below, Applicants respectfully request the Examiner to rejoin claims 9 and 10 with claim 7, because claim 7 is generic to claims 9 and 10, in that claim 9 claims a sequence listing species set forth in claim 7, part (f), and claim 10 claims a sequence listing species set forth in claim 7, part (g). In addition, Applicants respectfully request the Examiner to rejoin claims 38, 39, 55 and 56 with claim 7, because these claims are method claims that properly depend from and require all elements of the product claim 7.

Claim Rejection under 35 U.S.C. 101

In item 11, the Examiner has rejected claims 7, 23 and 24 under 35 U.S.C. 101 because these claims allegedly encompass non-statutory subject matter, e.g., a nucleic acid and cell as they occur in nature.

Claim 7 has been amended to include "An isolated" before "polynucleotide". Upon entry of the claim amendment, claim 7 and its dependent claims 23 and 24 no longer encompass a nucleic acid or a cell as they occur in nature. The rejection of claims 7, 23 and 24 under 35 U.S.C. 101 becomes moot, and is thus respectfully requested to be withdrawn.

Claim Objection

In item 8 of the Office Action, the Examiner has objected to claims 13-17 because they depend, directly or indirectly, from an allegedly rejected base claim, claim 7. The Examiner has indicated that these claims would be allowable if rewritten in independent form.

For reasons discussed below, the amended claim 7 is now allowable. Therefore, withdrawal of the objection to claims 13-17 is respectfully requested.

Claim Rejections under 35 U.S.C. 112

In item 12, the Examiner has rejected claim 24 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Without acquiescing to the Examiner's reasoning and arguments, claim 24 is hereby cancelled, rendering the rejection moot. Withdrawal of the rejection of claim 24 under 35 U.S.C. 112, first paragraph is thus respectfully requested.

In item 13 of the Office Action, the Examiner has rejected claims 32-37 under 35 U.S.C. 112, second paragraph, as being vague and indefinite. Again, it appears that claim 32 has been inadvertently included, because claim 32 depends from the withdrawn claim 31, rather than from claim 13.

In response to sub-item 13.1, claims 33-37 have been amended to recite "G protein effector activity" or "an index value" in step (b) of each of the claims. In response to sub-item 13.2, claims 33, 36 and 37 have been amended to recite "a test cell which has not been brought into contact with the test substance" in step (c) in each of claims 33, 36 and 37. In response to sub-item 13.3, claim 37 has been amended to recite "a rate of change" and "an index of value."

Upon entry of the above claim amendments, the rejections of claims 33-37 under 35 U.S.C. 112, second paragraph, become moot. Withdrawal of the rejections is thus respectfully requested.

CONCLUSION

Applicants respectfully submit that the present invention as claimed at least in claims 7-10, 13-17, 23, 33-39, 55 and 56, is allowable, and that this application is in condition for allowance, and such action is respectfully requested.

If a telephone discussion with the undersigned attorney will advance the prosecution and allowance of this application, the Examiner is invited to contact the undersigned attorney at the telephone number or e-mail address listed below.

Respectfully submitted,

YASUHIKO TAKAHASHI *et al.*

July 24, 2007   By: _____
(Date)

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